



Analysis Of the Effect Of Tax Administration Modernization, Quality Of Tax Officers' Services, And Tax Audits on MSME Taxpayer Compliance Registered at KPP Pratama Medan Polonia

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ABSTRACT

The purpose of this study is to analyze the effect of tax administration modernization, the quality of tax officers' services, and tax audits on the compliance of Micro, Small, and Medium Enterprises (MSME) taxpayers registered at KPP Pratama Medan Polonia. A quantitative method was employed using a multiple linear regression analysis approach. The study was based on primary data collected through questionnaires distributed to MSME taxpayers. The population consisted of 23,262 MSME taxpayers registered at KPP Pratama Medan Polonia, from which 100 respondents were selected using a simple random sampling technique. Data processing and analysis were conducted using

SPSS. The partial results indicate that tax administration modernization has a positive but insignificant effect on MSME taxpayer compliance. In contrast, the quality of tax officers' services and tax audits have a positive and significant effect on taxpayer compliance. Simultaneously, tax administration modernization, service quality, and tax audits significantly influence MSME taxpayer compliance, indicating that these factors collectively play an important role in improving tax compliance

INTRODUCTION

Tax revenue constitutes one of the most stable and essential sources of state financing for sustainable national development. In developing countries such as Indonesia, tax compliance plays a critical role in ensuring adequate funding for public infrastructure, education, healthcare, and social welfare programs. A high level of taxpayer compliance strengthens fiscal capacity and reduces dependence on external financing, whereas low compliance constrains government performance and undermines long-term economic stability (Tanzi & Zee, 2000; OECD, 2023). Consequently, identifying the determinants of taxpayer compliance remains a key concern for tax authorities and policymakers.

Micro, Small, and Medium Enterprises (MSMEs) represent a strategic segment of the Indonesian economy due to their substantial contribution to employment creation and gross domestic product. Despite their economic importance, MSMEs have long been associated with relatively low levels of tax compliance. Although the number of registered MSME taxpayers has increased steadily over recent years, this growth has not been accompanied by a proportional rise in Annual Tax Return submissions. This discrepancy indicates a persistent gap between formal registration and actual compliance behavior, suggesting structural and administrative challenges that require empirical investigation (Mapuasari et al., 2023).

In response to these challenges, the Indonesian Directorate General of Taxes has implemented comprehensive tax administration modernization programs, particularly through the adoption of digital tax systems such as e-registration, e-filing, e-billing, and e-invoicing. These initiatives are intended to improve efficiency, transparency, and accessibility of tax services while reducing administrative burdens for taxpayers. Prior empirical studies suggest that digital tax administration can lower compliance costs and enhance voluntary compliance among MSMEs by simplifying reporting procedures (Kusumawardhani et al., 2024). However, the effectiveness

of tax administration modernization is not uniform, especially among MSMEs, where digital literacy limitations and system complexity may reduce its intended impact (Haryanti et al., 2022).

Beyond technological systems, the quality of tax officers' services remains a crucial determinant of taxpayer behavior. Tax service quality reflects the competence, responsiveness, clarity of information, and professionalism of tax officials in assisting taxpayers. High-quality service fosters trust, enhances perceived fairness, and encourages voluntary compliance, particularly among MSMEs that often rely on direct guidance from tax officers (Rianty & Syahputra, 2020). Nevertheless, previous studies report mixed findings regarding the magnitude of service quality effects, indicating that its influence may depend on local administrative practices and taxpayer characteristics (Arslan et al., 2025).

Tax audits constitute another fundamental instrument in promoting taxpayer compliance. As both an enforcement and educational mechanism, tax audits aim to verify the accuracy of tax reporting while increasing taxpayer awareness of legal obligations. Effective audits can strengthen deterrence and reinforce the credibility of the tax system (Yogantara et al., 2021). However, audits perceived as unfair or overly punitive may generate resistance and undermine long-term compliance, emphasizing the importance of transparency and professionalism in audit implementation (Utamia & Estiningrum, 2023).

Empirical data from KPP Pratama Medan Polonia reveal a notable compliance issue among MSME taxpayers. Although the number of registered MSMEs increased consistently between 2020 and 2024, the number of MSME taxpayers submitting Annual Tax Returns remained disproportionately low and even declined in certain periods. This phenomenon highlights a critical research gap at the local tax office level, where modernization initiatives and service improvements have not fully translated into higher compliance outcomes.

Previous studies on MSME tax compliance have often examined tax administration modernization, service quality, or tax audits independently. Limited research has simultaneously analyzed these factors within a single empirical framework, particularly at the local tax office level. Moreover, localized empirical evidence focusing on MSME compliance behavior remains scarce, despite the likelihood that compliance dynamics vary across regions due to differences in institutional capacity, taxpayer characteristics, and administrative practices (Sarunan, 2015; Kusumawardhani et al., 2024).

This study seeks to address these gaps by analyzing the partial and simultaneous effects of tax administration modernization, tax officers' service quality, and tax audits on MSME taxpayer compliance at KPP Pratama Medan Polonia. By employing primary survey data and multiple linear regression analysis, this research contributes localized empirical evidence to the tax compliance literature and offers practical insights for tax authorities in designing integrated strategies that combine digitalization, service improvement, and effective audit mechanisms to enhance sustainable MSME taxpayer compliance.

LITERATURE REVIEW

Taxpayer Compliance

Taxpayer compliance refers to the willingness and ability of taxpayers to fulfill their tax obligations in accordance with prevailing tax regulations. In the context of MSMEs, compliance includes timely registration, accurate calculation of tax liabilities, punctual payment, and submission of Annual Tax Returns. Compliance theory explains that taxpayer behavior is influenced by both voluntary motivation and enforced mechanisms, such as regulations and audits (Milgram, 1963). Komalasari (2005) further classifies taxpayer compliance into administrative compliance, which relates to procedural obligations, and technical compliance, which concerns the accuracy of tax calculations and reporting.

In Indonesia, MSME taxpayer compliance remains a persistent challenge despite various policy interventions. According to PMK No. 74/PMK.03/2012, compliant taxpayers are required to submit tax returns on time, have no outstanding tax liabilities, and maintain reliable financial records. Low compliance among MSMEs is often attributed to limited tax knowledge, administrative complexity, and weak enforcement, which collectively undermine tax revenue potential (Sarunan, 2015).

Modernization of Tax Administration

Tax administration modernization refers to the reform of tax systems through organizational restructuring, regulatory simplification, and the adoption of information technology. The Indonesian tax authority has implemented various electronic systems, such as e-registration, e-filing, e-billing, and e-invoicing, to enhance efficiency, transparency, and service accessibility. According to Anggara (2016), modern tax administration aims to create an accountable and responsive system that supports effective tax collection.

Previous empirical studies suggest that tax administration modernization can reduce compliance costs and improve voluntary compliance by simplifying procedures and minimizing direct interaction with tax officers (Hernando & Wahyudin, 2020). Kusumawardhani et al. (2024) argue that digital tax systems are particularly beneficial for MSMEs by lowering administrative burdens. However, other studies report inconsistent findings, indicating that modernization alone may not significantly improve compliance due to limitations in digital literacy and system usability among MSME taxpayers (Haryanti et al., 2022).

Quality of Tax Officers' Services

The quality of tax officers' services reflects the ability of tax officials to provide accurate information, responsive assistance, and professional treatment to taxpayers. In accordance with Law No. 25 of 2009 on Public Services, tax services must be delivered in a transparent, accountable, and customer-oriented manner. Service quality is commonly measured using dimensions such as tangibility, reliability, responsiveness, assurance, and empathy (Rianty & Syahputra, 2020).

High-quality tax services contribute to increased taxpayer trust and satisfaction, which in turn encourage voluntary compliance. Empirical evidence demonstrates that competent and responsive tax officers positively influence MSME compliance by reducing uncertainty and improving taxpayers' understanding of their obligations (Simanjuntak et al., 2023). Nevertheless, some studies report insignificant effects, suggesting that service quality outcomes may vary depending on institutional context and taxpayer characteristics (Rianty & Syahputra, 2020).

Tax Audit

Tax audits represent a critical enforcement mechanism within the tax system, designed to examine the accuracy of tax reporting and ensure compliance with tax regulations. Based on PMK No. 199/PMK.03/2007, tax audits involve the systematic collection and evaluation of data, documents, and evidence to assess taxpayer compliance objectively and professionally.

Prior studies indicate that tax audits have a positive and significant effect on taxpayer compliance, as they increase the perceived risk of detection and penalties (Gunarso, 2016). Yogantara et al. (2021) emphasize that audits also serve an educational function by improving taxpayers' understanding of tax obligations. However, the effectiveness of tax audits depends on their transparency, fairness, and consistency. Audits perceived as punitive or arbitrary may generate resistance, whereas audits conducted with an educational approach can foster sustainable compliance among MSMEs.

Based on compliance theory, taxpayer behavior is influenced by both voluntary factors, such as trust and service quality, and enforced mechanisms, such as audits and regulatory systems. In the context of MSMEs, administrative simplicity, institutional support, and enforcement credibility play a crucial role in shaping compliance behavior.

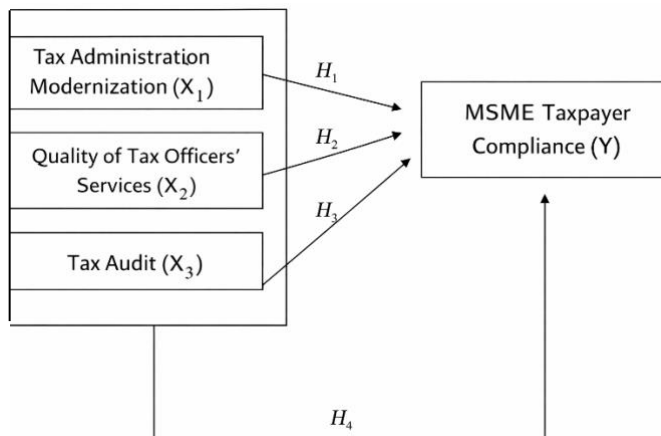


Figure 1. Conceptual Framework

Based on the description of the theory and conceptual framework that has been explained, the hypothesis in this study is formulated as follows:

Tax administration modernization is expected to enhance taxpayer compliance by simplifying tax procedures, reducing administrative burdens, and improving transparency. Digital tax systems are designed to facilitate reporting and payment processes, thereby encouraging voluntary compliance. However, empirical findings indicate that the impact of modernization on MSME compliance may vary depending on taxpayers' technological readiness and system usability. Nevertheless, modernization remains a key policy instrument in improving tax compliance.

H1: Tax administration modernization has a positive effect on MSME taxpayer compliance.

The quality of tax officers' services reflects the responsiveness, competence, and professionalism of tax authorities in assisting taxpayers. High-quality services improve taxpayers' understanding of tax obligations, foster trust in tax institutions, and strengthen voluntary compliance. Previous studies consistently report that better service quality leads to higher compliance, particularly among MSMEs that rely heavily on direct guidance from tax officers. Accordingly, the second hypothesis is proposed:

H2: The quality of tax officers' services has a positive effect on MSME taxpayer compliance.

Tax audits function as an enforcement mechanism that increases the perceived risk of non-compliance. When conducted fairly and transparently, tax audits not only deter tax evasion but also educate taxpayers regarding their legal obligations. Empirical evidence suggests that effective tax audits significantly improve taxpayer compliance by reinforcing accountability and awareness. Based on this reasoning, the third hypothesis is formulated as follows:

H3: Tax audits have a positive effect on MSME taxpayer compliance.

Tax administration modernization, service quality, and tax audits are not independent policy instruments but complementary elements within the tax administration system. Modernized systems facilitate compliance, high-quality services strengthen voluntary motivation, and audits ensure enforcement credibility. When implemented simultaneously, these factors are expected to create a more effective compliance environment for MSMEs. Therefore, the final hypothesis is stated as follows:

H4: Tax administration modernization, the quality of tax officers' services, and tax audits simultaneously have a positive effect on MSME taxpayer compliance.

RESEARCH METHODS

This study employs a quantitative research design with a descriptive and causal approach to test the proposed hypotheses and to analyze the causal relationships among the research variables. The independent variables examined in this study are Tax Administration Modernization (X_1), Quality of Tax Officers' Services (X_2), and Tax Audit (X_3), while the dependent variable is MSME Taxpayer Compliance (Y). This research design was selected because it allows the researcher to measure the influence of administrative systems, service quality, and enforcement mechanisms on taxpayer compliance using statistical analysis.

The type of data used in this study is primary quantitative data. Data were collected through structured questionnaires distributed directly to MSME taxpayers registered at KPP Pratama Medan Polonia. The population of this study consists of 23,262 MSME taxpayers registered at KPP Pratama Medan Polonia. A simple random sampling technique was applied to ensure that each member of the population had an equal opportunity to be selected as a respondent. Based on this technique, a total of 100 MSME taxpayers were selected as the research sample. The selected respondents are considered representative and relevant for achieving the research objectives.

The questionnaire was designed using a Likert scale to measure respondents' perceptions of tax administration modernization, service quality of tax officers, tax audits, and taxpayer compliance. Prior to hypothesis testing, the research instruments were evaluated through validity and reliability tests to ensure data quality. Validity testing was conducted using correlation analysis, while reliability was assessed using Cronbach's Alpha coefficients.

Multiple linear regression analysis was employed to examine the effect of the independent variables on the dependent variable. Hypothesis testing was carried out using t-tests to assess the partial effects of each independent variable, and an F-test to evaluate the simultaneous effect of tax administration modernization, service quality, and tax audits on MSME taxpayer compliance. In addition, the coefficient of determination (R^2) was used to measure the extent to which the independent variables explain variations in the dependent variable. All statistical analyses were performed using SPSS software.

RESEARCH RESULTS AND DISCUSSION

Research Results

Prior to hypothesis testing, data quality tests were conducted to ensure the reliability and validity of the research instruments. The validity test results indicate that all questionnaire items for MSME taxpayer compliance, tax administration modernization, quality of tax officers' services, and tax audits have correlation coefficients exceeding the critical value, confirming that all measurement items are valid. Furthermore, reliability testing using Cronbach's Alpha shows values greater than 0.60 for all variables, indicating that the instruments are reliable and internally consistent.

Descriptive statistical analysis reveals that MSME taxpayer compliance has a relatively high mean score, indicating that respondents generally perceive themselves as compliant with tax obligations. Tax administration modernization and service quality variables also exhibit relatively high mean values, reflecting positive perceptions of digital tax systems and tax officers' services. Meanwhile, the tax audit variable shows a moderate mean score, suggesting varying perceptions among respondents regarding audit implementation.

Classical assumption tests confirm that the regression model meets the required assumptions. The normality test using the Kolmogorov-Smirnov method indicates that the residuals are normally distributed, as the significance value exceeds the 0.05 threshold. Multicollinearity testing shows tolerance values above 0.10 and Variance Inflation Factor (VIF) values below 10 for all independent variables, indicating the absence of multicollinearity. Additionally, the heteroscedasticity test demonstrates a random distribution of residuals, confirming that the regression model is free from heteroscedasticity issues.

Multiple linear regression analysis was conducted to examine the effect of tax administration modernization (X_1), quality of tax officers' services (X_2), and tax audits (X_3) on MSME taxpayer compliance (Y). The regression results show that tax administration modernization has a positive but statistically insignificant effect on MSME taxpayer compliance, as indicated by a regression coefficient of 0.186 and a significance value of 0.054. In contrast, the quality of tax officers' services has a positive and significant effect on taxpayer compliance, with a coefficient of 0.356 and a significance value of 0.001. Similarly, tax audits demonstrate a positive and significant effect on MSME taxpayer compliance, with a coefficient of 0.407 and a significance value of 0.000.

The simultaneous test (F-test) indicates that tax administration modernization, service quality, and tax audits collectively have a significant effect on MSME taxpayer compliance. The F-statistic value of 83.673 is statistically significant at the 0.05 level. The coefficient of determination (R^2) is 0.723, which implies that 72.3% of the variation in MSME taxpayer

compliance can be explained by the three independent variables, while the remaining 27.7% is influenced by other factors outside the model.

Discussion

The findings indicate that tax administration modernization has a positive but insignificant effect on MSME taxpayer compliance. This result suggests that although digitalization and administrative reforms have improved efficiency and accessibility, these improvements alone are insufficient to significantly influence compliance behavior among MSMEs. Limited digital literacy, dependence on third parties for tax administration, and difficulties in adapting to new systems may hinder MSMEs from fully benefiting from modernized tax systems. From the perspective of compliance theory, modernization is expected to enhance voluntary compliance by simplifying tax procedures; however, when taxpayers perceive the system as complex or lack adequate guidance, modernization may not translate into behavioral change. This finding aligns with previous studies reporting insignificant effects of tax administration modernization on taxpayer compliance.

In contrast, the quality of tax officers' services is found to have a positive and significant effect on MSME taxpayer compliance. This result highlights the importance of responsive, informative, and professional services in fostering voluntary compliance. High-quality services enhance taxpayers' understanding of tax obligations, build trust in tax authorities, and create a supportive environment for compliance. Consistent with the Theory of Reasoned Action, positive interactions with tax officers shape favorable attitudes and subjective norms toward tax compliance, thereby strengthening taxpayers' intention to comply. This finding supports prior empirical evidence that service quality plays a crucial role in improving compliance behavior among MSMEs.

Tax audits also have a positive and significant effect on MSME taxpayer compliance, indicating that enforcement mechanisms remain effective in promoting compliance. Effective and transparent audits increase the perceived risk of non-compliance and reinforce accountability among taxpayers. Moreover, when audits are conducted fairly and professionally, they also serve an educational function by improving taxpayers' understanding of tax regulations. In line with attribution theory, audits can encourage taxpayers to internalize compliance as a personal responsibility rather than merely responding to external pressure. This result is consistent with previous studies emphasizing the role of tax audits in strengthening taxpayer discipline and compliance.

The simultaneous effect of tax administration modernization, service quality, and tax audits demonstrates that these factors are complementary rather than independent. Although modernization alone does not significantly influence compliance, its effectiveness increases when combined with high-quality services and effective audit practices. These findings imply that tax authorities should adopt an integrated approach that balances digital reform, service improvement, and enforcement mechanisms to achieve sustainable compliance among MSMEs. Such an approach is particularly relevant for local tax offices, where taxpayer characteristics and administrative capacity vary significantly.

CONCLUSION

This study examines the effect of tax administration modernization, the quality of tax officers' services, and tax audits on the compliance of Micro, Small, and Medium Enterprise (MSME) taxpayers registered at KPP Pratama Medan Polonia. Based on the analysis of data collected from 100 MSME taxpayers using multiple linear regression, several conclusions can be drawn.

First, tax administration modernization has a positive but statistically insignificant effect on MSME taxpayer compliance. This finding indicates that although digital tax systems and administrative reforms have been implemented to improve efficiency and accessibility, these initiatives alone have not been sufficient to significantly influence compliance behavior among MSMEs. Factors such as limited digital literacy, system complexity, and reliance on third parties may reduce the effectiveness of modernization efforts.

Second, the quality of tax officers' services has a positive and significant effect on MSME taxpayer compliance. This result demonstrates that responsive, professional, and informative services provided by tax officers play a crucial role in enhancing voluntary compliance. High-quality services foster trust, improve taxpayers' understanding of tax obligations, and encourage MSMEs to comply willingly with tax regulations.

Third, tax audits have a positive and significant effect on MSME taxpayer compliance. This finding confirms that effective audit practices increase compliance by strengthening enforcement credibility and raising taxpayers' awareness of their legal obligations. When conducted fairly and transparently, tax audits function not only as a deterrent mechanism but also as an educational tool that supports sustainable compliance.

Finally, tax administration modernization, service quality, and tax audits simultaneously have a positive and significant effect on MSME taxpayer compliance.

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